# DECISION AND FINDING OF NO SIGNIFICANT IMPACT

## Management of Vulture Damage in the State of Florida

The U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) program responds to requests for assistance from individuals, organizations and agencies experiencing damage caused by wildlife in Florida. Ordinarily, according to APHIS procedures implementing the National Environmental Policy Act (NEPA), individual wildlife damage management actions may be categorically excluded (7 CFR 372.5(c), 60 Fed. Reg. 6000-6003, 1995). To evaluate and determine if any potentially significant impacts to the human environment from WS' planned and proposed program would occur, an environmental assessment (EA) was prepared. The EA documents the need for vulture damage management (VDM) in Florida and assessed potential impacts of various alternatives for responding to damage problems. The EA analyzes the potential environmental and social effects for resolving vulture damage related to the protection of resources, and health and safety on private and public lands in Florida. WS' proposed action is to implement an Integrated Wildlife Damage Management (IWDM) program on public and private lands in Florida. Comments from the public involvement process were reviewed for substantive issues and alternatives which were considered in developing this decision.

Wildlife Services is the Federal program authorized by law to reduce damage caused by wildlife (Act of March 2, 1931 (46 Stat. 1468; 7 U.S.C. 426-426b) as amended, and the Act of December 22, 1987 (101 Stat. 1329-331, 7 U.S.C. 426c). Wildlife damage management is the alleviation of damage or other problems caused by or related to the presence of wildlife, and is recognized as an integral part of wildlife management (The Wildlife Society 1992). WS uses an IWDM approach, commonly known as Integrated Pest Management (WS Directive 2.105) in which a combination of methods may be used or recommended to reduce damage. WS wildlife damage management is not based on punishing offending animals but as one means of reducing damage and is used as part of the WS Decision Model (Slate et al. 1992, USDA 1997, WS Directive 2.201). Resource management agencies, organizations, associations, groups, and individuals have requested WS to conduct vulture damage management to protect resources and human health and safety in Florida. All WS wildlife damage management activities are in compliance with relevant laws, regulations, policies, orders and procedures, including the Endangered Species Act of 1973.

#### Consistency

The analyses in the EA demonstrate that Alternative 1: 1) best addresses the issues identified in the EA, 2) provides safeguards for public health and safety, 3) provides WS the best opportunity to reduce damage while providing low impacts on non-target species, 4) balances the economic effects to protected resources and property, and 5) allows WS to meet its obligations to government agencies or other entities.

#### **Monitoring**

The Florida WS program will annually review its impacts on target wildlife species and other species addressed in the EA each year to ensure that WS program activities do not impact the viability of target and non-target wildlife species. In addition, the EA will be reviewed each year to ensure that it and the analysis are sufficient.

#### **Public Involvement**

The pre-decisional EA was prepared and released to the public for a 44-day comment period by a legal notice in the *Pensacola News Journal* (North Florida), *Sun-Sentinel* (South Florida), and *The Tampa Tribune* (West-Central Florida) on July 17, 2005. A letter of availability for the pre-decisional EA was also mailed directly to agencies, organizations, and individuals with probable interest in the proposed program. Two comment documents were received from the public during the comment period. All comments were analyzed to identify substantial new issues, alternatives, or to re-direct the program. Responses to specific comments are included in Appendix A. Based upon these comments, some minor editorial changes have been incorporated into the EA. These minor changes enhanced the understanding of the proposed program, but did not change the analysis. All letters are maintained in the administrative file located at the Wildlife Services State Office in Gainesville, Florida.

#### **Affected Environment**

The areas of the proposed action could include areas in and around commercial, industrial, public, and private buildings, facilities and properties and at other sites where birds may roost, loaf, feed, nest or otherwise occur. Examples of areas where vulture damage management activities could be conducted are, but are not necessarily limited to: agricultural fields, vineyards, orchards, farmyards, dairies, ranches, livestock operations, waste handling facilities, bridges, industrial sites, natural areas, government properties and facilities, private homes and properties, corporate properties, schools, hospitals, cemeteries, parks and recreation areas (including sports fields, playgrounds, swimming pools, etc.), swimming lakes, communally-owned homeowner/property owner association properties, natural areas, wildlife refuges, wildlife management areas, coastal and tidal beaches, ponds, rivers, and inlets, airports and surrounding areas. The control areas may also include property adjacent to identified sites where vultures are causing damage or conflicts. Vulture damage control may be conducted when requested by a landowner or manager, and only on properties with a Cooperative Agreement with WS. The proposed action may be conducted on properties held in private, local, state or federal ownership.

#### **Major Issues**

The EA describes the alternatives considered and evaluated using the identified issues. The following issues were identified as important to the scope of the analysis (40 CFR 1508.25).

- 1) Effects on Target (Black and Turkey Vulture) Species Populations
- 2) Effects on Non-target Wildlife Species Populations, including T&E Species
- 3) Effects on Human Health and Safety

- 4) Effects on Aesthetics
- 5) Humaneness and Animal Welfare Concerns of Methods Used by WS

### Alternatives Analyzed in Detail

The following five alternatives were developed to respond to the issues. One additional alternative was considered but not analyzed in detail. Appendix B of the EA provides a description of the methods that could be used or recommended by WS under each of the alternatives. A detailed discussion of the effects of the Alternatives on the issues is described in the EA; below is a summary of the Alternatives.

Alternative 1 – Integrated Wildlife Damage Management/ Vulture Damage Management Program (Proposed Action/No Action). The proposed action is for the WS program to continue the current IWDM program that responds to requests for VDM to protect property, livestock, pets, human health and safety, and agricultural resources in the State of Florida. An IWDM approach would be implemented which would allow use of any legal technique or method, used singly or in combination, to meet requestor needs for resolving conflicts with turkey or black vultures. Cooperators requesting assistance would be provided with information regarding the use of effective nonlethal and lethal techniques. Lethal methods used or recommended by WS would include shooting and live trapping followed by euthanasia. Nonlethal methods used or recommended by WS would include habitat alteration, husbandry practices, wire barriers and deterrents, tactile repellents, effigies, and harassment and scaring devices. In many situations, the implementation of nonlethal methods such as habitat alteration, husbandry practices, harassment, and deterrents would be the responsibility of the requestor to implement. VDM by WS would be allowed in the State, when requested, on private property sites or public facilities where a need has been documented, upon completion of an Agreement for Control. All management actions would comply with appropriate federal, state, and local laws.

Alternative 2 – Nonlethal VDM Only By WS. Under this alternative, only nonlethal direct control activities and technical assistance would be provided by WS to resolve vulture damage and conflicts. Persons receiving WS nonlethal assistance could still resort to lethal methods that were available to them. Requests for information regarding lethal management approaches would be referred to Florida Fish and Wildlife Conservation Commission (FFWCC), U.S. Fish and Wildlife Service (FWS), local animal control agencies, or private businesses or organizations. Individuals or agencies might choose to implement WS nonlethal recommendations, implement lethal methods or other methods not recommended by WS, contract for WS nonlethal direct control services, use contractual services of private businesses, use volunteer services of private organizations, or take no action. In some cases, control methods employed by others could be contrary to the intended use or in excess of what is necessary.

<u>Alternative 3 – Technical Assistance Only.</u> This alternative would not allow for WS operational VDM in Florida. WS would only provide technical assistance and make recommendations when requested. Producers, property owners, agency personnel, or others could conduct VDM using any lethal or nonlethal method that is legal.

Alternative 4 – Lethal VDM Only By WS. Under this alternative, only lethal direct control activities and technical assistance would be provided by WS to resolve vulture damage and conflicts. Persons receiving WS lethal assistance could still resort to nonlethal methods that were available to them. WS technical assistance would include making recommendations to the FWS regarding the issuance of Migratory Bird Treaty Act (MBTA) permits to affected resource/property owners to allow them to lethally remove vultures. Requests for information regarding nonlethal management approaches would be referred to FFWCC, FWS, local animal control agencies, or private businesses or organizations. Individuals or agencies might choose to implement WS lethal recommendations, implement nonlethal methods or other methods not recommended by WS, contract for WS lethal direct control services, use contractual services of private businesses, use volunteer services of private organizations, or take no action. In some cases, control methods employed by others could be contrary to the intended use or in excess of what is necessary.

Alternative 5 – No Federal WS VDM. This alternative would eliminate WS involvement in VDM in Florida. WS would not provide direct control or technical assistance. Requesters of WS services would have to conduct their own VDM without WS input. Requests for information regarding VDM approaches would be referred to FFWCC, FWS, local animal control agencies, or private businesses or organizations. Producers, property owners, agency personnel, or others could conduct VDM using any lethal or nonlethal method that is legal. In some cases, control methods employed by others could be contrary to the intended use or in excess of what is necessary.

## Alternatives Considered but not Analyzed in Detail with Rationale

Live Trap and Relocation - Relocation of damaging birds to other areas following live capture generally would not be effective or cost-effective. As a short term solution, vultures have been relocated but returned to the trap site within eight months (Humphrey et al. 2000). Relocation to other areas following live capture would not generally be effective because problem bird species are highly mobile and can easily return to damage sites from long distances (Humphrey et al. 2000), habitats in other areas are generally already occupied, and relocation may result in bird damage problems at the new location. Humphrey et al. (2000) also reported for relocation to be effective, habitat modification and harassment were necessary at the original site. Translocation of wildlife is also discouraged by WS policy (WS Directive 2.501) because of stress to the relocated animal, poor survival rates, and difficulties in adapting to new locations or habitats (Nielsen 1988).

An example of an unsuccessful attempt by Virginia WS to trap and relocate black and turkey vultures took place in 1997 when WS live trapped and relocated 41 black and 8 turkey vultures. The trapped vultures were patagial wing tagged, loaded into turkey crates, and transported and released near sunset approximately 17 miles west of the capture site on the same day they were captured. Upon release some of the black vultures subsequently moved to other farms and killed livestock. Others moved to nearby towns

and became part of a new urban/suburban roost which had to be dispersed with harassment methods. As a result of this relocation effort, WS received letters and phone calls from County Boards of Supervisors and County Administrators opposing relocation of vultures. The counties opposing relocation were in the Shenandoah Valley, Southwestern, New River Valley, and Southside regions of Virginia. The reasons were the counties had an ongoing black vulture livestock predation problem, an urban vulture roost problem, or both problems.

## Finding of No Significant Impact (FONSI)

The analysis in the EA indicates that there will not be a significant impact, individually or cumulatively, on the quality of the human environment as a result of this proposed action. I agree with this conclusion and, therefore, find that an EIS need not be prepared. This determination is based on the following factors:

- 1. Vulture damage management as conducted by WS in Florida is not regional or national in scope.
- 2. The proposed action would pose minimal risk to public health and safety. Risks to the public from WS methods were determined to be low in a formal risk assessment (USDA 1997, Appendix P).
- 3. There are no unique characteristics such as park lands, prime farm lands, wetlands, wild and scenic areas, or ecologically critical areas that would be significantly affected. Built-in mitigation measures that are part of WS's standard operating procedures and adherence to laws and regulations will further ensure that WS activities do not harm the environment.
- 4. The effects on the quality of the human environment are not highly controversial. Although there is some opposition to wildlife damage management, this action is not highly controversial in terms of size, nature, or effect.
- 5. Based on the analysis documented in the EA and the accompanying administrative file, the effects of the proposed damage management program on the human environment would not be significant. The effects of the proposed activities are not highly uncertain and do not involve unique or unknown risks.
- 6. The proposed action would not establish a precedent for any future action with significant effects.
- 7. No significant cumulative effects were identified through this assessment. The EA discussed cumulative effects of WS on target and non-target species populations and concluded that such impacts were not significant. The Florida Fish and Wildlife Conservation Commission concurs with this determination.
- 8. The proposed activities would not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places,

nor would they likely cause any loss or destruction of significant scientific, cultural, or historical resources. If an individual activity with the potential to affect historic resources is planned under the selected alternative, then site-specific consultation as required by Section 106 of the NHPA would be conducted as necessary.

- 9. Wis has determined that the proposed project would have no effect any Federal or Florida State listed threatened or endangered species. This no effect determination is based on an evaluation of WS methods in the U.S. Fish and Wildlife Service's (USFWS) 1992 Biological Opinion (BO) on the Animal Damage Control Program. The Florida Fish and Wildlife Conservation Commission concurs with this determination.
- 10. The proposed action would be in compliance with all federal, state, and local lav/s.

#### Decision and Rational

I have carefully reviewed the Environmental Assessment prepared for this proposal and the input from the public involvement process. I believe that the issues identified in the EA are best addressed by selecting Alternative 1 (Integrated Wildlife Damage Management/Vulture Damage Management Program (Proposed Action/No Action)) and applying the associated Standard Operating Procedures discussed in Chapter 3 of the EA. Alternative 1 is selected because (1) it offers the greatest chance at maximizing effectiveness and benefits to resource owners and managers while minimizing cumulative impacts on the quality of the human environment that might result from the program's effect on target and non-target species populations; (2) it presents the greatest chance of maximizing net benefits while minimizing adverse impacts to public health and safety; and, (3) it offers a balanced approach to the issues of humaneness and aesthetics when all facets of these issues are considered. The comments identified from public involvement were minor and did not change the analysis. Therefore, it is my decision to implement the proposed action as described in the EA.

Copies of the EA are available upon request from the USDA, APHIS, WS, 2820 East University Avenue, Gainesville, FL 32641.

Charles S. Brown, Regional Director

USDA-APHIS-WS Eastern Region

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# Appendix A Response to Comments to the Environmental Assessment "Mangement of Vulture Damage in the State of Florida"

Issue 1: The scope of the EA is too broad in terms of geographic region affected by the proposed action.

**Program Response 1:** Some individuals question whether preparing an EA for an area as large as the State of Florida would meet the NEPA requirements for site specificity. In terms of considering cumulative impacts, one EA analyzing impacts for the entire State may provide a better analysis than multiple EA's covering smaller zones. In addition, Florida WS only conducts vulture damage management in small areas of the State where damage is occurring or likely to occur.

Issue 2: The EA fails to fully explain what procedures WS will use to evaluate damage.

**Program Response 8:** As described in section 3.2.3 of the EA, WS uses a Decision Model (Slate et al. 1992) to evaluate damage at the site specific level. In assessing the damage, immediate attention is given to confirming the type of damage and that damage was caused by vultures. Commonly this requires an inspection, depending on the type and complexity of the problem. Then severity of the problem is considered in deciding which management options are potentially applicable. Once the problem assessment is completed, all available methods are evaluated for their practicality.

Issue 3: The EA fails to sufficiently describe how WS will respond to requests for assistance; How does WS decide which management approach to use. What incentives or disincentives do WS consider when deciding on a management approach?

Program Response 3: As described in section 3.2.3 of the EA, WS uses a Decision Model (Slate et al. 1992) to determine the appropriate course of action to reduce vulture damage and conflicts at the site specific level. WS personnel assess the problem and evaluate the appropriateness and availability (legal and administrative) of strategies and methods based on biological, economic and social considerations. Following this evaluation, the methods deemed to be practical for the situation are developed into a management strategy. After the management strategy has been implemented, monitoring is conducted and evaluation continues to assess the effectiveness of the strategy.

Issue 4: There is no evidence that the proposed vulture damage management program is effective at reducing vulture damage and conflicts.

**Program Response 4:** As described in section 3.2.8 of the EA, WS vulture damage management activities have been effective in reducing vulture damage and conflicts in Florida.

# Issue 5: The EA fails to evaluate an alternative that would require all feasible and practical non-lethal methods to be exhausted before turning to lethal control.

**Program Response 5:** This alternative is similar to the proposed action alternative. Under the proposed action, WS would provide technical assistance which includes instructional sessions, technical and biological information about vultures, information about harassment and husbandry, loaning of scare equipment, selling or distributing harassment tools to property owners and managers, and information on lethal damage management methods (e.g. migratory bird depredation permits). WS would assist property owners and managers with the migratory bird depredation permit process to obtain permits to legally remove vultures to reinforce harassment programs. WS would conduct direct damage management assistance with nonlethal and lethal methods. Nonlethal methods used by WS would include the use of pyrotechnics, lasers, electronic harassment, tactile repellents, mechanical repellents (e.g., coil wire, porcupine wire), modified electric fencing on buildings, effigies and taxidermy prepared effigies, and habitat alteration. Lethal methods used by WS would include shooting and live capture followed by euthanasia. WS recommends and utilizes an Integrated Wildlife Damage Management approach to manage wildlife conflicts. Where property owners or managers would have already adopted a vulture management plan that encompasses such an integrated approach, the WS action would be to assist with the implementation of the integrated wildlife damage management program. Lethal vulture removal would be conducted by WS in situations where nonlethal damage management methods such as harassment, husbandry, and habitat alteration are not appropriate, are ineffective, or are inadequate to achieve vulture damage management goals when used alone.

## Issue 6: WS should avoid using lethal methods that are non-selective (i.e. baited live traps) and that may result in the killing of vultures that have not caused damage.

**Program Response 6:** WS personnel are trained and experienced to select the most appropriate method for taking target animals. Before initiating management activities, including live trapping, WS would select sites which are extensively used by the target species.

## Issue 7: The EA overstates the potential risks of disease transmission from vultures to humans and livestock.

**Program Response 7:** As summarized in section 1.3 of the EA, vultures have the potential to spread and transmit diseases to humans and livestock. Even though some of these diseases currently do not occur in Florida, the potential risks are real. Since WS may be requested to assist in managing vulture populations to reduce the spread of diseases, WS believes that a discussion of the potential risks associated with wildlife diseases is appropriate and well within the scope of this document. WS discussion of potential disease risks is not overstated and is presented to inform the decision maker of the types of diseases for which WS assistance may be requested.

Issue 8: It is not appropriate to use population trends or indices of relative abundance to analyze the impact of the Proposed Action.

Program Response 8: The Breeding Bird Survey (BBS) and Christmas Bird Count (CBC) data are the survey instruments used by the USFWS; U.S. Geological Survey, Division of Biological Survey; and WS for monitoring vulture and other bird populations. These survey instruments can reveal important changes in the status of a species population across a broad area. They have been used since the 1980's to detect declines in bird species abundance and since 1994 to estimate population trends (Peterjohn 1994). These survey instruments are appropriate for detecting broad population trends for vultures (Kirk and Mossman 1998, Kiff 2000). For a vast majority of the approximately 650 bird species in North America there is no feasible way to estimate population size because methods have not been developed/tested for the species in question or the methods are too labor intensive to implement in large-scale surveys (Link and Sauer 1998). Thus government agencies, conservation organizations, and others must rely on existing survey instruments to monitor the status of individual bird species populations. Section 4.1.1 of the EA discusses this issue in greater detail.

The BBS is the primary source of information on population change and relative abundance for many North American bird species (Sauer et al. 2005). Survey results are used for a variety of conservation activities including setting harvest regulations for mourning doves (Sauer et al. 1994) and developing management plans for regional conservation initiatives such as Partners in Flight (Carter et al. 2000). Surveys, such as the BBS, form the primary sources of information on population change (Link and Sauer 1998). While flaws in the BBS are well documented (Sauer et al. 2003) it remains one of the best survey instruments available for most bird species, including vultures.

The CBC survey is another appropriate survey instrument for detecting broad population trends for vultures (Kirk and Mossman 1998, Kiff 2000). We feel the CBC is appropriate data to use for vulture population analysis because there is no definitive population estimate for vultures and this survey instruments allow us to monitor wintering vulture population trends. While CBC observation sites may change from year to year, it is possible to analyze CBC data from the same observation sites to analyze population trends (M. Avery, NWRC, pers. commun.). Also, the CBC is a 24-hour survey thus it can count vultures throughout the day and its less affected than surveys that count only during a smaller time frame of the day. This can be important as turkey vultures are more numerous in the afternoon than in the morning (Bunn et al. 1995).

Issue 9: Animal husbandry practices, such as livestock carcass removal, should be implemented by farmers prior to WS using lethal control methods on vultures.

**Program Response 9:** Wildlife Services has no authority to require producers to implement any particular wildlife damage management method or strategy. Under the proposed action, WS would provide technical assistance which includes information on animal husbandry practices. WS recognizes the importance of good husbandry and management practices in helping to reduce wildlife damage. WS policy is to respond to all requests for assistance within program authority and responsibility. If improved husbandry practices would likely reduce a predation problem, WS makes recommendations regarding these practices. Although, there is no law or policy requiring

livestock producers to employ good husbandry practices to protect their livestock, most Florida livestock producers do employ a variety of husbandry practices and nonlethal damage management methods to protect their livestock as a matter of good business.

Issue 10: Management methods that capture and restrain and/or kill vultures are inhumane and may cause undue pain and suffering.

**Program Response 10:** As described in sections 2.2.4 and 2.2.5 of the EA, WS recognizes that people have wide and varying opinions and beliefs regarding WS use of control methods. Florida WS personnel are experienced and professional in their use of management methods so that they are as humane as possible under the constraints of current technology and funding. Standard Operating Procedures used to maximize humaneness are listed in Chapter 3 of the EA.

Issue 11: Wildlife Services should use and recommend the most up to date and effective methods available for preventing and resolving conflicts between humans and vultures.

Program Response 11: WS uses and recommends the most up to date and effective methods available for preventing and resolving conflicts between humans and vultures. WS personnel receive information and training on a periodic basis to keep them aware new methods and techniques that become available for use in the wildlife damage management arena. Furthermore, the National Wildlife Research Center (NWRC) functions as the research arm of WS by providing scientific information and development of methods for wildlife damage management that are effective and environmentally responsible. NWRC scientists work closely with wildlife managers, researchers, field specialists and others to develop and evaluate wildlife damage management techniques. NWRC scientists have authored hundreds of scientific publications and reports, and are respected world-wide for their expertise in wildlife damage management. As new effective methods become available, the Florida WS will consider them for potential use in managing vulture damage and conflicts throughout the state.